Message

From: Thrift, Mike [thrift.mike@epa.gov]

Sent: 10/26/2015 4:13:02 PM

To: Samulski, Michael [samulski.michael@epa.gov]; Charmley, William [charmley.william@epa.gov]
CC: Manning, Bryan [manning.bryan@epa.gov]; Audette, Lucie [audette.lucie@epa.gov]; Leggett, Cullen

[Leggett.Cullen@epa.gov]; Orlin, David [Orlin.David@epa.gov]; Mueller, John [mueller.john@epa.gov]; Yen, David

[Yen.David@epa.gov]; Williams, Melina [Williams.Melina@epa.gov]

Subject: RE: Draft Aircraft CO2 Briefing for Gina

Attachments: ICAO Aircraft CO2 Std_Gina briefing 10-23-15-mt102615.pptx

Ex. 5 - Attorney Client

Mike Thrift

United States Environmental Protection Agency

Office of General Counsel

San Diego Border Office

610 West Ash Street

San Diego, CA 92101

Thrift.mike@epa.gov

619-321-1960

From: Samulski, Michael

Sent: Monday, October 26, 2015 8:44 AM

To: Charmley, William <charmley.william@epa.gov>

Cc: Manning, Bryan <manning.bryan@epa.gov>; Audette, Lucie <audette.lucie@epa.gov>; Leggett, Cullen

<Leggett.Cullen@epa.gov>; Thrift, Mike <thrift.mike@epa.gov>; Orlin, David <Orlin.David@epa.gov>; Mueller, John

<mueller.john@epa.gov>; Yen, David <Yen.David@epa.gov>

Subject: Draft Aircraft CO2 Briefing for Gina

Bill,

Ex. 5 - Deliberative Process

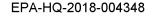
Mike

Michael Samulski

U.S. Environmental Protection Agency Office of Transportation and Air Quality Director, Large Marine and Aircraft Center

1 (734) 214-4532

samulski.michael@epa.gov



e.

To: Chad_S_Whiteman Ex. 6 - Personal Privacy
Laszlo.Windhoffer@faa.gov[Laszlo.Windhoffer@faa.gov];
maryalice.locke@faa.gov[maryalice.locke@faa.gov]; James.Hileman@faa.gov[James.Hileman@faa.gov
Lourdes.Maurice@faa.gov[Lourdes.Maurice@faa.gov];
Lourdes.Maurice@faa.gov[Lourdes.Maurice@faa.gov]; curtis.holsclaw@faa.gov[curtis.holsclaw@faa.gov]; jlaity@
rrutledge (Ex. 6 - Personal Privacy Griffiths, Charles (Griffiths. Charles @epa.gov); Kopits,
Elizabeth[Kopits.Elizabeth@epa.gov]; Arthur.Rypinski@dot.gov[Arthur.Rypinski@dot.gov];
pwolfe@mit.edu[pwolfe@mit.edu]; morrisab@mit.edu[morrisab@mit.edu];
byutko@mit.edu[byutko@mit.edu]; athomas(Ex. 6 - Personal Privacy
anne.bechdolt@dot.gov[anne.bechdolt@dot.gov]; Samulski, Michael[samulski.michael@epa.gov];
Charmley, William[charmley.william@epa.gov]; Manning, Bryan[manning.bryan@epa.gov];
Candace_M_Vahlsing(Ex. 6 - Personal Privacy
Richard_Duke Ex. 6 - Personal Privacy
From: Ralph.lovinelli@faa.gov
Sent: Fri 2/19/2016 6:54:15 PM
Subject: Domestic implmentation of the Int'l Aircraft CO2 Emissions Standard
OMB Regulatory Planning and Analysis - 2 18 2016.pdf
OIRA CO2 CBA MIT Main 2016 2 18 v1.pdf
OIRA CAEP10 CO2 Main Analysis 2016-02-17 v3.pdf
CAEP.10.IP.023.5 United States-Only CBA Of The Intern ICAO CO2 Standard Stringency Options
(SOs).pdf
CAEP.10.IP.024.5 Global CBA Of The ICAO CO2 Standard Stringency Options (SOs).pdf

Dear All,

Thank you for a productive meeting yesterday. Attached please find the meeting presentations and the ICAO/CAEP information papers.

As discussed in the meeting, we have less than 3 years + 10 months to accomplish a positive endangerment finding and 2 regulations for 2 different agencies. Efficiency, timing, coordination, and cooperation are critical.

Points of contact for these efforts are:

EPA – Mike Samulski 734-214-4832

FAA – Ralph Iovinelli 202-267-3566

Best Regards,

Ralph lovinelli

Manager, Emissions Division (AEE-300)

EPA-HQ-2018-004348

Office of Environment and Energy

Federal Aviation Administration

800 Independence Ave., SW

Washington, DC 20591

+1-202-267-3566 office

+1-202-288-6372 mobile

ralph.iovinelli@faa.gov

To: Manning, Bryan[manning.bryan@epa.gov]

Cc: Leggett, Cullen[Leggett.Cullen@epa.gov]; Samulski, Michael[samulski.michael@epa.gov];

Maeroff, Bruce[Maeroff.Bruce@epa.gov]

From: Thrift, Mike

Sent: Fri 6/17/2016 5:09:07 PM

Subject: RE: Exceptions: ICAO/CAEP aircraft CO2 standard

Ex. 5 - Attorney Client

From: Manning, Bryan

Sent: Friday, June 17, 2016 9:08 AM **To:** Thrift, Mike shrift.mike@epa.gov

Cc: Leggett, Cullen < Leggett. Cullen@epa.gov>; Samulski, Michael

<samulski.michael@epa.gov>; Maeroff, Bruce <Maeroff.Bruce@epa.gov>

Subject: Exceptions: ICAO/CAEP aircraft CO2 standard

Hello Mike,

Ex. 5 - Attorney Client

Thanks,

Bryan

EPA-HQ-2018-004348

Bryan Manning

U.S. EPA Office of Transportation and Air Quality

Large Marine and Aviation Center

2000 Traverwood Drive

Ann Arbor, MI 48105

(ph) 734-214-4832 (fax) 734-214-4816

To: Manning, Bryan[manning.bryan@epa.gov]

Cc: Leggett, Cullen[Leggett.Cullen@epa.gov]; Mueller, John[mueller.john@epa.gov]

From: Thrift, Mike

Sent: Thur 1/21/2016 4:40:28 PM

Subject: RE: Response to Comment Question: aircraft GHG endangerment FRM (what is US covered

aircraft?)

Ex. 5 - Attorney Client

From: Manning, Bryan

Sent: Thursday, January 21, 2016 8:17 AM **To:** Thrift, Mike <a href="mailto: thrift.mike@epa.gov

Cc: Leggett, Cullen < Leggett.Cullen@epa.gov>; Mueller, John < mueller.john@epa.gov> Subject: Response to Comment Question: aircraft GHG endangerment FRM (what is US

covered aircraft?)

Hello Mike,

Ex. 5 - Attorney Client

Ex. 5 - Attorney Client

Ex. 5 - Attorney Client

Bryan

Bryan Manning

U.S. EPA Office of Transportation and Air Quality

Large Marine and Aviation Center

2000 Traverwood Drive

Ann Arbor, MI 48105

(ph) 734-214-4832 (fax) 734-214-4816

To: Samulski, Michael[samulski.michael@epa.gov]

Cc: Manning, Bryan[manning.bryan@epa.gov]; Leggett, Cullen[Leggett.Cullen@epa.gov]

From: Audette, Lucie

Sent: Tue 11/10/2015 5:17:13 PM

Subject: RE: ICAO + Canada

Aviation CO2 standards key messages draft 11 10 15 +lca.docx

Mike, just saw your forward for what it's worth Cullen and I were working on some edits. Attached especially expanding the Bombardier background which may be helpful to WH.

From: Samulski, Michael

Sent: Tuesday, November 10, 2015 12:13 PM

To: Blubaugh, Jim <Blubaugh.Jim@epa.gov>; Charmley, William <charmley.william@epa.gov>;

Hengst, Benjamin < Hengst. Benjamin@epa.gov>

Cc: Manning, Bryan <manning.bryan@epa.gov>; Audette, Lucie <audette.lucie@epa.gov>;

Leggett, Cullen < Leggett. Cullen@epa.gov>

Subject: RE: ICAO + Canada

Here is an updated set of talking points which includes Bill's comments. Also, I added a "Goal" statement along the lines of the message Jim wanted to add.

The areas where I made edits are highlighted in yellow.

Michael Samulski

Mike

U.S. Environmental Protection Agency

Office of Transportation and Air Quality

Director, Large Marine and Aircraft Center

1 (734) 214-4532

samulski.michael@epa.gov

From: Blubaugh, Jim

Sent: Tuesday, November 10, 2015 11:09 AM To: Samulski, Michael; Charmley, William

Cc: Manning, Bryan; Audette, Lucie; Leggett, Cullen

Subject: RE: ICAO + Canada

Thanks Mike. I can add this to the paper I'm creating and wait a little for Bill to weigh in. One thing to note, and I understand there may be some sensitivities around this issue, but can we simply write as the first key message 'Ex. 5 - Deliberative Process Or something like that? Ex. 5 - Deliberative Process

Jim

From: Samulski, Michael

Sent: Tuesday, November 10, 2015 10:32 AM

To: Blubaugh, Jim <Blubaugh.Jim@epa.gov>; Hengst, Benjamin <Hengst.Benjamin@epa.gov>;

Charmley, William < charmley.william@epa.gov>

Cc: Manning, Bryan <manning.bryan@epa.gov>; Audette, Lucie <audette.lucie@epa.gov>;

Leggett, Cullen < Leggett. Cullen@epa.gov>

Subject: RE: ICAO + Canada

Jim,

Here is my current draft, which has not yet been reviewed. I left a paper copy with JoNell to give to Bill when he gets out of his 10:00 meeting.

I will get you any updates before 2:00.

Mike

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

Michael Samulski

U.S. Environmental Protection Agency

Office of Transportation and Air Quality

Director, Large Marine and Aircraft Center

1 (734) 214-4532

samulski.michael@epa.gov

From: Blubaugh, Jim

Sent: Tuesday, November 10, 2015 10:24 AM

To: Samulski, Michael; Hengst, Benjamin; Charmley, William

Cc: Manning, Bryan

Subject: RE: ICAO + Canada

Thanks Mike. I just heard from OAR and it looks like they want this material by 2 PM today. Can you quickly pull a half pager together on our work with Canada here and send it to me? I will combine it with a little info on our ongoing transportation collaboration as well as VW. Sorry for the quick turnaround...

Jim

From: Samulski, Michael

Sent: Tuesday, November 10, 2015 7:33 AM

To: Hengst, Benjamin < Hengst. Benjamin@epa.gov>; Charmley, William

<charmley.william@epa.gov>

Cc: Blubaugh, Jim < Blubaugh.Jim@epa.gov >; Manning, Bryan < manning.bryan@epa.gov >

Subject: RE: ICAO + Canada

This sounds great! We will pull together a 1-pager and get it to Bill today.

Unless you have any objection, I had planned to reach out to Richard Holt as well (Richard is my contact at Environment Canada).

So vou are aware:

Ex. 5 - Deliberative Process

Ex. 5 - Deliberative Process

Clean and redline copies are attached.

Candace said they would be giving this paper to Dan Utech and Brian Deese today for a quick review (then it will go into the IGIA process today or Thursday). My main point being that Brian Deese should have some background on this issue.

Mike

Michael Samulski

U.S. Environmental Protection Agency

Office of Transportation and Air Quality

Director, Large Marine and Aircraft Center

1 (734) 214-4532

samulski.michael@epa.gov

From: Hengst, Benjamin

Sent: Monday, November 09, 2015 8:50 PM

To: Samulski, Michael

Cc: Charmley, William; Blubaugh, Jim

Subject: ICAO + Canada

Mike,

Ex. 5 - Deliberative Process

Bill may have additional thoughts, but I wanted to pass on what I could for now.

EPA-HQ-2018-004348

thanks,

Ben

To: Manning, Bryan[manning.bryan@epa.gov]

Leggett, Cullen[Leggett.Cullen@epa.gov]; Audette, Lucie[audette.lucie@epa.gov] Cc:

From: Thrift, Mike

Tue 2/24/2015 12:46:34 AM Sent:

Subject: RE: Full Response to all of FAA comments is now on SharePoint for your review

Aircraft GHG Preamble - Master 2-17-15-mt022315.docx

I made some edits at around p. 146 re the discussion on change-based criteria for subjecting significant redesigns to the. x. 5 - Attorney Client

Ex. 5 - Attorney Client

Tried to save in sharepoint but it wouldn't upload for some reason,. So attached is my renamed file that has my edits over what you posted a couple hours ago.

Mike Thrift

United States Environmental Protection Agency

Office of General Counsel

San Diego Border Office

610 West Ash Street

San Diego, CA 92101

Thrift.mike@epa.gov

619-321-1960

From: Thrift, Mike

Sent: Monday, February 23, 2015 3:56 PM

To: Manning, Bryan

Cc: Leggett, Cullen; Audette, Lucie

Subject: RE: Full Response to all of FAA comments is now on SharePoint for your review

Never mind I found it

Mike Thrift

United States Environmental Protection Agency

Office of General Counsel

San Diego Border Office

610 West Ash Street

San Diego, CA 92101

Thrift.mike@epa.gov

619-321-1960

From: Thrift, Mike

Sent: Monday, February 23, 2015 3:53 PM

To: Manning, Bryan

Cc: Leggett, Cullen; Audette, Lucie

Subject: RE: Full Response to all of FAA comments is now on SharePoint for your review

Not sure I'm finding it, Bryan. The doc I've found with that title says it was last updated 5 days ago. That isn't it, is it?

Mike Thrift

United States Environmental Protection Agency

Office of General Counsel

San Diego Border Office

610 West Ash Street

San Diego, CA 92101

Thrift.mike@epa.gov

619-321-1960

From: Manning, Bryan

Sent: Monday, February 23, 2015 1:54 PM

To: Thrift, Mike

Cc: Leggett, Cullen; Audette, Lucie

Subject: Full Response to all of FAA comments is now on SharePoint for your review

Hello Mike,

We have incorporated our responses to the comments we received from FAA on Friday in the Master Working Preamble in SharePoint (Aircraft Endangerment subteam folder/Working Preamble 2-17-2015). If you have time, this is an chance to review these latest revisions (which we hope to swap out for the current version now going to OMB).

Thank you,

Bryan

Bryan Manning

U.S. EPA Office of Transportation and Air Quality

Large Marine and Aviation Center

2000 Traverwood Drive

Ann Arbor, MI 48105

(ph) 734-214-4832 (fax) 734-214-4816



Message

From: Manning, Bryan [manning.bryan@epa.gov]

Sent: 8/19/2014 8:36:40 PM

To: Horowitz, Michael [horowitz.michael@epa.gov]

CC: Audette, Lucie [audette.lucie@epa.gov]; Leggett, Cullen [Leggett.Cullen@epa.gov]

Subject: FW: Draft Info Paper for ICAO/CAEP SG14 meeting (Endang/ANPR GHG)

Attachments: Draft Info Paper for SG2014 7-10-14c_OAP.docx

Hello Michael,

I left you a similar voice mail. As you may recall, Glenn Passavant sent the below email at 8:57 this morning, and subsequently OAP provided the attached comments on the information paper we plan to send to the ICAO/CAEP Steering Group meeting in September (if we get the okay from Janet McCabe). The purpose of the information paper is to notify CAEP of our plans to issue a proposed aircraft GHG endangerment finding/ANPR. If at all possible, could you provide any comments you may have on this attached paper as soon as you can — added to OAP's comments? We would ask Mike Thrift, but he is not available until September. The paper deadline is August 29, and we need to give FAA a chance to review the paper before this deadline.

Thank you,

Bryan

Bryan Manning
U.S. EPA Office of Transportation and Air Quality
Large Marine and Aviation Center
2000 Traverwood Drive
Ann Arbor, MI 48105
(ph) 734-214-4832 (fax) 734-214-4816
manning.bryan@epa.gov

From: Passavant, Glenn

Sent: Tuesday, August 19, 2014 2:58 PM

To: Manning, Bryan

Subject: FW: Draft Info Paper for ICAO/CAEP SG14 meeting (Endang/ANPR GHG)

Glenn W. Passavant US EPA/ASD Ann Arbor, MI 48105 734-214-4408(office) 517-902-7565(cell)

From: Jantarasami, Lesley

Sent: Tuesday, August 19, 2014 2:45 PM

To: Passavant, Glenn; Birnbaum, Rona; Horowitz, Michael; Thrift, Mike; Audette, Lucie; DeAngelo, Ben

Subject: RE: Draft Info Paper for ICAO/CAEP SG14 meeting (Endang/ANPR GHG)

Hi everyone,

Thanks for the opportunity to comment – we (Rona, Ben and I) have some edits in the attached. Please let us know if you have any questions.

Best,

Lesley

Lesley Jantarasami U.S. EPA, Climate Change Division jantarasami.lesley@epa.gov (202)-343-9929

From: Passavant, Glenn

Sent: Tuesday, August 19, 2014 8:57 AM

To: Birnbaum, Rona; Jantarasami, Lesley; Horowitz, Michael; Thrift, Mike

Subject: FW: Draft Info Paper for ICAO/CAEP SG14 meeting (Endang/ANPR GHG)

Folks

Attached is draft of an Information Paper we hope to provide for next month's CAEP meeting. It addresses our next steps on the CO2 endangerment effort and for the most part reflects language in the reg agenda abstract. It would likely go to CAEP before labor day.

At this point we do not have Janet McKay's clearance, but wanted to get your input assuming we will get her okay.

Glenn W. Passavant US EPA/ASD Ann Arbor, MI 48105 734-214-4408(office) 517-902-7565(cell)

From: Manning, Bryan

Sent: Monday, August 18, 2014 5:37 PM

To: Leggett, Cullen; Audette, Lucie; Passavant, Glenn; Samulski, Michael; Maeroff, Bruce; Yen, David

Subject: Draft Info Paper for ICAO/CAEP SG14 meeting (Endang/ANPR GHG)

Hello,

In case we need to send the draft information paper (for the CAEP Sept Steering Group meeting) on endang/ANPR GHG to FAA after I leave for vacation, attached please find the latest version. Of course, this depends on getting the okay from Janet to send the info paper to the Steering Group meeting (which Bill is trying to obtain). Note, FAA's Lourdes Maurice indicated today on a call that information papers are <u>not</u> circulated to IGIA. We just need FAA's review (Lourdes, Ralph, Laszlo, and Pat Moran) before it is sent to the CAEP Steering Group.

Thank you,

Bryan

P.S. I will be on vacation from Aug 20 through Aug 28.

Bryan Manning U.S. EPA Office of Transportation and Air Quality Large Marine and Aviation Center 2000 Traverwood Drive Ann Arbor, MI 48105 (ph) 734-214-4832 (fax) 734-214-4816 EPA-HQ-2018-004348

To: Eric.Upton@gulfstream.com[Eric.Upton@gulfstream.com]

From: Leggett, Cullen

Sent: Thur 4/30/2015 6:57:19 PM

Subject: Papers for Belfast

ICAO Aircraft CO2 Emissions Databank Introduction Text - v4 redline.docx

Eric,

Here is a slightly cleaned up version of Intro. I've left a fair number of comments in and included some responses to them. Let me know what you think. I think we will also need to come up with a specific proposal for how the data will be added/reviewed/verified. A small flow diagram would work well and we could edit the text to a line with it.

I'm going to take a look at the latest version of the DB later and make sure that is good to go.

Cullen

To: Amy Doll[adoll@endyna.com]; Viator, Catherine (viator@rti.org)[viator@rti.org]

Cc: Jones, Jason[jasonjones@rti.org]; siddhanti@endyna.com[siddhanti@endyna.com]; Mueller,

John[mueller.john@epa.gov]; Yen, David[Yen.David@epa.gov]

From: Manning, Bryan

Sent: Wed 1/17/2018 7:53:06 PM

Subject: WA 1-15 -- Updated Volumes of ICF Report & Tech Response Spreadsheet

ICF - EPA Aircraft CO2 Cost Assessment Jan 16 2018.docx

Tech Response Spreadsheet Jan 16 2018.xlsx

ICF - EPA Aerospace Industry Characterization Jan 16 2018.docx

Hi Amy,

As we discussed last week (for WA 1-15), attached please find the updated volumes of the ICF report and the updated technology response spreadsheet. All three documents are now dated January 16, 2018, and thus, as you know, the dates in your cover letter to the peer reviewers will need to be revised to this date. These documents are now ready to go to the peer reviewers (when you are ready to send them). Let me know if you have any questions.

Thank you,

Bryan

P.S. Also, you should already have the March 17, 2015 ICF report, but let me know if you misplaced it.

Bryan Manning

U.S. EPA Office of Transportation and Air Quality

Large Marine and Aviation Center

2000 Traverwood Drive

Ann Arbor, MI 48105

(ph) 734-214-4832 (fax) 734-214-4816

